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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,102	08/11/2000	David C. Schwartz	1512.112	7761

23598 7590 07/11/2007

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EXAMINER
DAVIS, DEBORAH A

ART UNIT	PAPER NUMBER
1655	

NOTIFICATION DATE	DELIVERY MODE
07/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@boylefred.com

Office Action Summary	Application No.	Applicant(s)	
	09/638,102	SCHWARTZ, DAVID C.	
	Examiner	Art Unit	
	Deborah A. Davis	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 March 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,5-7,9-13,35,41 and 43-52* is/are pending in the application.

4a) Of the above claim(s) *14-33* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2, 5-7, 9-13, 35, 41 AND 43-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

In view of the decision of the Board of Appeals on March 23, 2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

TERRY MCKELVEY, PH.D.
SUPERVISORY PATENT EXAMINER

Bruce M. Kisliuk, Director
Technology Center 1600

Allowable Subject Matter

The indicated allowability of claims 35, 2, 5-7 and 9-13 are withdrawn in view of the newly discovered reference(s) Kambara in view of Stimpson. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 5-7, 9-13, 35, 41 and 43-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stimpson et al (USP#6,037,186) in view of Kambara et al (USP#6,288,220).

The claims are drawn to a semi-custom array and a chemical screening kit comprising at least two different strips of a non-reactive substrate extending along a longitudinal axis and supporting, spaced along that longitudinal axis, a linear array of different, chemically reactive substance exposed on a surface of the strip; and a support frame for receiving and holding the strips for mutual exposure to a material to be screened wherein the strips include isolating bands of a chemically repellant coating between the chemically reactive substances.

The cited reference of Stimpson beneficially teaches two-dimensional arrays formed by cutting bundles or porous rods or spiral wound porous material (i.e. linear

strips) and can be composed of thin lines of compounds (column 3, lines 35-45). The arrays of porous strips were treated with bovine serum albumin (BSA), which is a non-reactive substrate that extends along a longitudinal axis. The array of porous rods consists of a myriad of different zones each of which can have different binding properties (column 14, Example 1). In one embodiment, Stimpson teaches strips supporting linear arrays of different chemically reactive compounds on porous sheet materials. The porous sheet materials contain longitudinally printed lines of different chemically reactive substances (column 3, lines 35-45; column 5, lines 9-39; col. 13, lines 15-34 and columns 15-16 (Example 5); Figure 2). The porous rods or strips can be made into glass or ceramic material (column 12, lines 42-54) and therefore read on glass fibers as claimed. The strips include hydrophobic ink lines (see Figure 2B), which read on isolating bands of chemically repellant coating between the chemically reactive substances. Markings or colors are synthesized with paint on the arrays to distinguish sequences (column 11, lines 18-38). Such markings can be generated by photo-masks (i.e. printing) as claimed (column 7, lines 56-60). The arrays can be held together by bonding or a mechanical device, (i.e. a support frame, see column 10, lines 1-15) and the strips include recessed portions that receive the chemically reactive substances (see Figure 2A). Therefore it would appear that the strips would be transversely spaced in parallel along two perpendicular axes.

The cited reference of Stimpson does not teach assembling the different linear arrays into larger arrays as instantly claimed.

However, the cited reference of Kambara beneficially teaches assembling different linear arrays into large two-dimensional arrays. Kambara teaches linear arrays of beads coated with DNA probes (column 3, lines 45-53). The beads are arrayed linearly in capillary tubes (column 8, lines 15-16). A plurality of capillary tubes can be assembled to create a two-dimensional probe array in which the capillary arrays are different from each other (column 4, lines 10-14; column 12, lines 24-33; column 18, (claim 10)). Kambara teaches that the arrays provide a process that permits easy production of a desired DNA probe array with a high density and entails a low production cost (column 1, lines 47-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the array of Stimpson who produced different linear arrays held together in a bonding or mechanical device (i.e. support frame) and assemble them into larger different linear arrays taught by Kambara based on the beneficial teachings of Kambara which permits easy production of a desired DNA probe array with a high density and entails a low production cost. One would have been motivated to assemble the larger arrays to cut production costs.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Davis whose telephone number is (571) 272-0818. The examiner can normally be reached on 8-5 Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, McKelvey Terry can be reached on (571) 272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D. A. D.

Deborah A. Davis
Patent Examiner
Art Unit 1655
May 2007

Terry a McKelvey

TERRY MCKELVEY, PH.D.
SUPERVISORY PATENT EXAMINER